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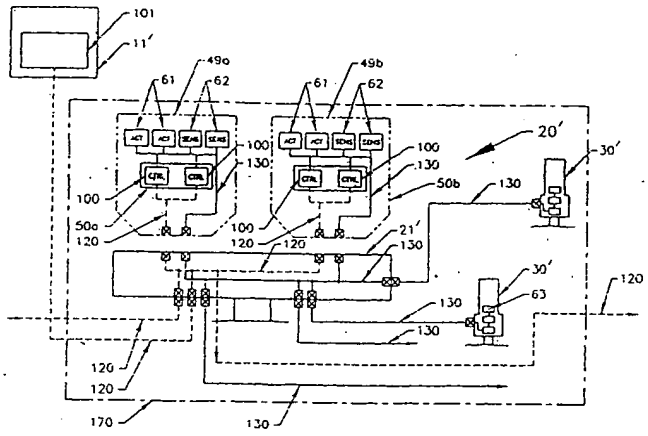
(54) Title: A METHOD AND SYSTEM FOR CONTROLLING THE OPERATION OF DEVICES IN A HYDROCARBON PRODUCTION SYSTEM



(57) Abstract: A system for controlling the operation of devices (61, 62, 63) of a hydrocarbon production system has two reprogrammable central controllers (100) contained in a retrievable module (49a) of a seabed facility (20') associated with a hydrocarbon field (170). Local controllers are configured to control the operation of specific devices, such as actuators (61), sensors (62) and valves (63) within the module (49a) and within tree wellheads (30') of the field (170) and are locally connected to these devices (61, 62, 63). A single common data bus (130) links the central controllers (100) and the local controllers and enables data to be transmitted between the central controllers (100) and the local controllers in response to the central controllers (100) receiving signals. Each local controller has a microprocessor for processing the data transmitted to it, and the processed data is transmitted between the local controller and its associated devices (61, 62, 63) in accordance with the processed data so as to locally control the operation of those devices.

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